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January 29, 1998

RECEIVED

JAN 2 9 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Hand Delivered

Ms. Magalie Roman Salas Secretary Federal Communications Commission 1919 M Street, N.W., Room 222

Re:

Washington, D.C. 20554

Written Ex Parte Filing

CC Docket No. 96-128

Dear Ms. Salas:

Transmitted herewith, on behalf of TDS Telecommunications Corporation (TDS Telecom) and its local exchange carrier subsidiaries, and pursuant to Section 1.1206(b)(1) of the Commission's Rules, are two copies of written materials being submitted today by TDS Telecom to the Commission's staff regarding estimated cost analyses and predicted timelines for implementation of the Commission's payphone coding requirements established in the above-referenced docket. This information is being submitted in response to inquiries made by the Commission's staff in an ex parte meeting that took place with representatives of TDS Telecom on January 14, 1998.

In the event there are questions concerning this matter, please contact me.

Very truly yours,

R. Edward Price

Enclosure

cc (w/encl) by hand delivery: Rose M. Crellin, Esq. Mr. Craig Stroup

> No. of Copies rec'd 072 List ABCDE

TDS TELECOMMUNICATIONS CORPORATION EX PARTE MEETING ON PAYPHONE CODING RESPONSES TO FCC STAFF QUESTIONS

(submitted January 29, 1998)

1. What would be the cost for TDS Telecommunications Corporation's (TDS's) local exchange carrier (LEC) subsidiaries to implement a Line Information Data Base (LIDB) method for satisfying the FCC's payphone coding requirements?

Answer: The cost of implementing a LIDB solution among all TDS LECs would consist of approximately \$128,740 in initial (one-time) labor set up costs and \$20,740 of yearly data base maintenance costs. These costs are outline in Attachment A. The LIDB vendor (Illuminet) would not charge TDS for any initial set-up fee or for any monthly fee. TDS would not be charged for queries by other carriers, but it would be charged an estimated \$.018 for each query initiated by a TDS LEC.

2. How was the \$2,055,000 Flex ANI installation cost calculated?

Answer: This installation cost estimate is based on the additional investment required to upgrade the TDS central offices that are not currently capable of providing Flex ANI. Attachment B contains a breakdown of the estimated Flex ANI feature cost by switch type. Please note that the total cost estimate provided in the answer to Question 3 (below) and in Attachment C contains the additional cost software contained in preexisting switch upgrades.

3. What is the cost of Flex ANI per end office?

Answer: Attachment C illustrates the estimated cost of Flex ANI by end office type. The attachment divides TDS end offices into two categories: (1) those which require upgrades; and (2) those for which no upgrade is needed to support Flex ANI. The total cost of \$2,548,270 includes the cost of pre-existing software that enables end offices in the second category to provide Flex ANI.

4. When will TDS complete its current program of replacing obsolete NEC switches used by some of its local exchange carrier subsidiaries?

Answer: TDS plans to complete this switch replacement program by January 1, 1999.

5. On average, how many payphones does TDS have per switch?

Answer: TDS has approximately 30 company and independently owned payphones per switch.

TDS Telecommunications Corporation
January 29, 1998
Page 2

6. Does TDS have any switches that do not serve a single payphone?

Answer: No. All TDS switches serve at least one payphone.

7. What is the ratio of TDS payphones to independent payphones?

Answer: TDS LECs serve approximately 2.5 times as many company owned payphones as independently owned payphones.

8. How long would it take TDS to implement Flex ANI?

Answer: Assuming an order is issued in February 1998, it would take TDS approximately two years to implement Flex ANI. It would take approximately four months for planning and securing the feature from each vendor. It would then take approximately another 18 months to implement and test the feature in each switch. See Attachments D1 & D2 for estimated implementation schedules by switch and payphone. (These estimates assume a testing period for Flex ANI without unanticipated problems or delays.)

9. What would be the amount of the monthly line charge a Payphone Service Provider (PSP) would pay to TDS for Flex ANI assuming the LECs' charge the PSPs for the LECs' Flex ANI costs?

Answer: The monthly line charge to recover the Flex ANI costs from PSPs would be \$8.80 over a ten year period, \$13.52 over a five year period, or \$19.81 over a three year period. See Attachment E1, E2 & E3 for detailed calculations. Current payphone monthly line rates (excluding the aforementioned rates for Flex ANI) range from a high of \$65.00 per line per month at Quincy Telephone Company in Georgia to a low of \$7.44 at Island Telephone Company in Michigan. These per line rates do not include installation charges.

10. What is the average coin in box for TDS payphones?

Answer: The average coin in box for TDS payphones is \$14.80. For individual TDS companies, this average coin collected ranges from \$101.00 at Goshen Telephone Company to \$0.00 at 33 TDS companies. These numbers are based on TDS's December 1997 billing cycle.

TDS Telecommunications	Corporation
January 29, 1998	
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11. Of the 760 payphones for which software upgrades would be required to offer Flex ANI, how many independent payphones are included?

Answer: None. The 760 payphones represent only TDS company owned payphones. Associated independent payphones number 148.

12. Of the 3,200 total company payphones noted, how many are company owned and how many are independently owned?

Answer: TDS owns all of the reported 3,200 payphones. Independent payphones number approximately 1,300. The total number of payphones is approximately 4,500.

13. How many host switches serve the reported 760 payphones?

Answer: There are 41 host switches serving those 760 payphones.

TDS TELECOM Cost Analysis of TDS Implementation of LIDB Attachment A As of January 21, 1998

Estimated Cost of Implementing & Maintaining the LIDB:

Estimated Set Up Costs:

•	
Number of host Switches	149
X Number of Translation & Testing Labor Hours per Host	16
Total Translation Hours	2,384
X Loaded Labor Rate per Hour	\$ 54.00
Total Set up Cost	\$ 128,736.00
d Cost to Maintain Database:	
Maintenance Days per Month	4
X Months per Year	12
X Hours per Day	8
Total Hours	384
X Loaded Labor Rate per Hour	\$ 54.00
Total Maintenance Cost per Year	\$ 20,738.00
	X Number of Translation & Testing Labor Hours per Host Total Translation Hours X Loaded Labor Rate per Hour Total Set up Cost d Cost to Maintain Database: Maintenance Days per Month X Months per Year X Hours per Day Total Hours X Loaded Labor Rate per Hour

Estimated Cost of Database Query:

According to Illuminet there are no set up or monthly fees for the LIDB. However, if TDS TELECOM wished to interrogate the data base, each dip would cost an estimated \$.018 per data dip.

TDS TELECOM Cost Analysis of TDS Implementation of Flex ANI For Equal Access Switches Attachment B As of January 21, 1998

Estimated Cost to Add Flex ANI Programming by Switch Type:

Switch Type	Estimated Cost	End Offices	Cost per End Office
NEC NEAX61E (see note 1)	\$ 1,500,000	11	\$ 136,364
Lucent 5ESS (see note 2)	12,994	2	6,497
Seimens EWSD	51,992	13	3,999
Alcatel E10-5	3,994	1	3,994
Nortel DMS-500	9,200	1	9,200
Nortel DMS-100	18,400	2	9,200
Nortel DMS-10 (see note 3)	60,077	2	30,039
Seimens DCO (see note 4)	398,342	10	39,834
Total	\$ 2,054,999	42	

- Notes: 1) Cost to Upgrade G3.2 software to G4.0. This is a special request since NEC America is not supporting this switch.
 - 2) Remaining TDS 5ESS switches have already paid for the feature.
 - 3) Upgrades from release 403.31 to release 404.3 needed for 2 DMS-10 switches.
 - 4) Seimens feature cost of \$3.830 and DCO generic release upgrade cost of \$60,000 per impacted switch.

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TDS TELECOM Total Estimated Flex ANI Cost Attachment C As of January 21, 1998

	Estimated Softwa	re Translation Cost (See	Switch Replacement		Number of	
Switch Type	Cost	Note 1)	Cost	Per Switch Total	Switches	Total Cost
Upgrades Needed:						
NEC NEAX	\$ 136,36	60 \$ 1,300	\$ 371,820	\$ 509,480	11 \$	5,604,280
Nortel DMS-10	30,04	1,300	742,500	773,840	2	1,547,680
Nortel DMS-100	9,20	1,300	-	10,500	2	21,000
Nortel DMS-500	9,20	-	-	10,500	1	10,500
Lucent 5ESS	6,50		-	7,800	2	15,600
Seimens EWSD	4,00	•	-	5,300	13	68,900
Seimens DCO	39,80	1,300	-	41,100	10	411,000
Included in Original Switch Cost:						
Lucent 5ESS	2,20	0 1,300	_	3,500	28	98,000
Seimens DCO	3,83	0 1,300	-	5,130	43	220,590
Nortel DMS-10		- 1,300	-	1,300	26	33,800
Nortel DMS-100	9,20	0 1,300	-	10,500	1	10,500
Seimens EWSD (note 2)	4,00	0 1,300	-	5,300	4	21,200
Redcom	8,74	0 1,300	-	10,040 _	6	60,240
	Total			<u>-</u>	149 \$	8,123,290
	Switch Replaceme	ent Cost				(5,575,020)
	Total Cost without	Switch Replacement Cos	t			2,548,270

Notes: 1) Translation Cost = 3 Days X 8 Hours/Day X \$54.00 Loaded Labor Rate = \$1,296, Rounded to \$1,300

TDS TELECOM Tentative Flex ANI Implementation Schedule Attachment D1 As of January 21, 1998

		İ		Start Date (see		Completed	Percent
Company	Exchange	Switch Model	State	note 1)	In Service Date	Switches	Complete
entral State	Junction City	5ESS	WI	01-Jun-98	03-Jun-98		
ommunication Corporation of Michigan(CCM)	Augusta	5ESS	MI	04-Jun-98	08-Jun-98		
ommunications Corporation of Indiana(CCI)	Clayton - IN	5ESS-EXM	iN	09-Jun-98	11-Jun-98		
ommunications Corporation of Indiana(CCI)	Roachdale	5ESS-2000	IN	12-Jun-98	16-Jun-98		
ommunications Corporation of Southern Indiana(CCSI)	Wadesville	5ESS-2000 CDX	IN	17-Jun - 98	19-Jun-98		
oncord	Concord	5ESS-2000	TN	22-Jun-98	24-Jun-98		
ast Coast	Cleveland	5ESS-2000	Wi	25-Jun-98	29-Jun-98		
June 1998 Cumulative Amount		•				7	4.70%
shen	Goshen	5ESS-2000 VCDX	AL	30-Jun-98	02-Jul-98		
ove Hill	Grove Hill	5ESS-2000	AL	03-Jul-98	07-Jul-98		
ppy Valley	Olinda	5ESS-2000	CA	08-Jul-98	10-Jul-98		
parsarge	New London - NH	5ESS	NH	13-Jul-98	15-Jul-98		
tle Miami Communications Corp.	Fayetteville	5ESS-2000	ОН	16-Jul-98	20-Jul-98		
dlow	Ludlow	5ESS-2000	VT	21-Jul-98	23-Jul-98		
d-State	New London - MN	5ESS	MN	24-Jul-98	28-Jul-98		
rthfield	Northfield	5ESS-2000	VT	29-Jul-98	31-Jul-98		
incy	Quincy	5ESS-2000	FL	03-Aug-98	05-Aug-98		
verside	Johnson Creek	5ESS-2000 CDX	WI	06-Aug-98	10-Aug-98		
rvice	Fair Bluff	5ESS-2000 CDX	NC	11-Aug-98	13-Aug-98		
iawassee	Perry	5ESS-2000	MI	14-Aug-98	18-Aug-98		
nnessee	Halls Crossroads	5ESS-2000	TN	19-Aug-98	21-Aug-98		
nnessee	LaVergne	5ESS	TN	24-Aug-98	26-Aug-98		
nnessee	Mt. Juliet	5ESS-2000	TN	27-Aug-98	31-Aug-98		
nnessee	Parsons	5ES\$-2000	TN	01-Sep-98	03-Sep-98		
nnessee	Waynesboro	5ESS-2000	TN	04-Sep-98	08-Sep-98		
ton	Tipton	5ESS	IN	09-Sep-98	11-Sep-98		
ginia	Hot Springs	5ESS-2000	VA	14-Sep-98	16-Sep-98		
unakee	Waunakee	5ESS-2000	WI	17-Sep-98	21-Sep-98		
lliston	Williston	5ESS	sc	22-Sep-98	24-Sep-98		
plyerine	Millington	5ESS-2000	MI	25-Sep-98	29-Sep-98		
September 1998 Cumulative Amount	•		•	,		29	19.46%
plyerine	Sanford	5ESS-2000	МІ	30-Sep-98	02-Oct-98		

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TDS TELECOM Tentative Flex ANI Implementation Schedule Attachment D1 As of January 21, 1998

				Start Date (see	l	Completed	Percent
Company	Exchange	Switch Model	State	note 1)	In Service Date	Switches	Complete
Arizona	Blue Ridge - AZ	DCO-SE	AZ	05-Oct-98	07-Oct-98		
Arizona	Roosevelt	DCO-E	ΑZ	08-Oct-98	12-Oct-98		
Arizona	Tonto Basin	DCO-SE	AZ	13-Oct-98	15-Oct-98		
Asotin	Asotin	DCO-E	WA	16-Oct-98	20-Oct-98		
Black Earth	Black Earth	DCO-SE	WI	21-Oct-98	23-Oct-98		
Blue Ridge	Blue Ridge - GA	DCO	GA	26-Oct-98	28-Oct-98		
Calhoun City	Calhoun City	DCO-E	MS	29-Oct-98	02-Nov-98		
Cleveland County	Rison	DCO-E	AR	03-Nov-98	05-Nov-98		
Cleveland County	Rowel	DCO-E RNS	AR	06-Nov-98	10-Nov-98		
Communication Corporation of Michigan(CCM)	Clayton - MI	DCO-SE	MI	11-Nov-98	13-Nov-98		
Communications Corporation of Indiana(CCI)	Wickliffe	DCO-SE	IN	16-Nov-98	18-Nov-98		
Communications Corporation of Southern Indiana(CCSI)	Elnora	DCO	IN	19-Nov-98	23-Nov-98		
Decatur Decatur	Decatur	DCO-E	AR	24-Nov-98	26-Nov-98		
Grantland	Fennimore	DCO	WI	27-Nov-98	01-Dec-98		
fartland & St. Albans	Hartland	DCO-E RNS	ME	02-Dec-98	04-Dec-98		
dome (OR)	Condon	DCO-E	OR	07-Dec-98	09-Dec-98		
fornitos	Hornitos	DCO-E	CA	10-Dec-98	14-Dec-98		
eslie County	Buckhorn	DCO-E RNS	KY	15-Dec-98	17-Dec-98		
eslie County	Dwarf	DCO-E RNS	KY	18-Dec-98	22-Dec-98		
eslie County	Hyden	DCO-E	KY	23-Dec-98	25-Dec-98		
fcClellanville	McClellanville	DCO-SE	SC	28-Dec-98	30-Dec-98		
December 1998 Cumulative Amount						51	34.23%
ft. Vernon	Verona	DCO	WI	31-Dec-98	04-Jan-99		
fyrtle	Myrtle	DCO-SE	MS	05-Jan-99	07-Jan-99		
ew Castle	New Castle	DCO-E	VA	08-Jan-99	12-Jan-99		
ew London	New London - MO	DCO-SE	MO	13-Jan-99	15-Jan-99		
akman	Nauvoo	DCO-SE RNS	AL	18-Jan-99	20-Jan-99		
akman	Oakman	DCO-SE	AL	21-Jan-99	25-Jan-99		
akwood	Oakwood	DCO	ОН	26-Jan-99	28-Jan-99		
klahoma Communication Systems (OCSI)	Cyril	DCO-SE	OK	29-Jan-99	02-Feb-99		
klahoma Communication Systems (OCSI)	Inola	DCO-SE	OK	03-Feb-99	05-Feb-99		
klahoma Communication Systems (OCSI)	Union City	DCO-SE RNS	ок	08-Feb-99	10-Feb-99		
rchard Farm	Orchard Farm	DCO-SE	MO	11-Feb-99	15-Feb-99		

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TDS TELECOM Tentative Flex ANI Implementation Schedule Attachment D1 As of January 21, 1998

Company	Exchange	Switch Model	State	Start Date (see note 1)	In Service Date	Completed Switches	Percent Complete
Peoples	Cedar Bluff	DCO-SE RNS	AL	16-Feb-99	18-Feb-99		
Peoples	Centre	DCO-E	AL	19-Feb-99	23-Feb-99		
Peoples	Crossville	DCO-SE RNS	AL	24-Feb-99	26-Feb-99		
Peoples	Grayson	DCO-SE	AL	01-Mar-99	03-Mar-99		
Port Byron	Port Byron	DCO	NY	04-Mar-99	08-Mar-99		
Somerset	Coburn Gore	DCO-SE RNS	ME	09-Mar-99	11-Mar-99		
Somerset	Norridgewock	DCO-SE RNS	ME	12-Mar-99	16-Mar-99		
Somerset	North Anson2	DCO	ME	17-Mar-99	19-Mar-99		
Somerset	Strong	DCO-SE RNS	ME	22-Mar-99	24-Mar-99		
Southwestern	Quartzite	DCO	ΑZ	25-Mar-99	29-Mar-99		
March 1999 Cumulative Amount						72	48.32%
Southwestern	Salome	DCO-SE RNS	AZ	30-Mar-99	01-Apr-99		
Stoutland	Stoutland	DCO-SE	МО	02-Apr-99	06-Apr-99		
Sugar Valley	Loganton	DCO-SE	PA	07-Apr-99	09-Apr-99		
'ellico	Englewood	DCO-E RNS	TN	12-Apr-99	14-Apr-99		
[ellico	Tellico Plains	DCO-E	TN	15-Apr-99	19-Apr-99		
l'ellico	Vonore	DCO-E RNS	TN	20-Apr-99	22-Apr-99		
renney renney	Alma	DCO-SE	WI	23-Apr-99	27-Apr-99		
Vest Penobscot	Corinna	DCO-E	ME	28-Apr-99	30-Apr-99		
Vest Penobscot	Jonesboro	DCO-E RNS	ME	03-May-99	05-May-99		
Vinterhaven	Winterhaven	DCO-SE	CA	06-May-99	10-May-99		
Volverine	Munger	DCO-SE	MI	11-May-99	13-May-99		
rcadia	Arcadia	DMS-10	OH	14-May-99	18-May-99		
londuel	Bonduel	DMS-10	WI	19-May-99	21-May-99		
utler	Butler	DMS-10 HSO	AL	24-May-99	26-May-99		
Butler	Lisman	DMS10 SSO	AL	27-May-99	31-May-99		
hatham	Chatham	DMS-10	MI	01-Jun-99	03-Jun-99		
anube	Danube	DMS-10M	MN	04-Jun-99	08-Jun-99		
eposit	Afton	DMS-10 SSO	NY	09-Jun-99	11-Jun-99		
peposit	Deposit	DMS-10	NY	14-Jun-99	16-Jun-99		
eposit	Harpursville	DMS-10 SSO	NY	17-Jun-99	21-Jun-99		
eposit	Sherman	DMS-10 SSO	NY	22-Jun-99	24-Jun-99		
Deposit	Windsor	DMS-10 SSO	NY	25-Jun-99	29-Jun-99		

TDS TELECOM Tentative Flex ANI Implementation Schedule Attachment D1 As of January 21, 1998

Company	Exchange	Switch Model	State	Start Date (see note 1)	In Service Date	Completed Switches	Percent Complete
June 1999 Cumulative Amount						94	63.09%
Edwards	Edwards	DMS-10 SSO	NY	30-Jun-99	02-Jul-99		
Edwards Edwards	Hermon	DMS-10 330	NY	05-Jul-99	02-Jul-99		
Hampden	Hampden	DMS-101130	ME	03-Jul-99	12-Jul-99		
Island	Bois Blanc	DMS-10 SSO	MI	13-Jul-99	15-Jul-99		
Island	St. James	DMS-10 HSO	Mi	16-Jul-99	20-Jul-99		
Lewis River	LaCenter	DMS-10	WA	21-Jul-99	23-Jul-99		
Lewisport	Lewisport	DMS-10 HSO	KY	26-Jul-99	28-Jul-99		
McDaniel	Salkum	DMS-10	WA	29-Jul-99	02-Aug-99		
Mid-State	Brooten	DMS-10	MN	03-Aug-99	05-Aug-99		
Riverside	Reeseville	DMS-10 SSO	WI	06-Aug-99	10-Aug-99		
Salem	Salem - KY	DMS-10 SSO	KY	11-Aug-99	13-Aug-99		
Saluda Mountain	Saluda	DMS-10	NC	16-Aug-99	18-Aug-99		
Stockbridge & Sherwood	Sherwood	DMS-10	Wi	19-Aug-99	23-Aug-99		
Stockbridge & Sherwood	Tisch Mills	DMS-10	WI	24-Aug-99	26-Aug-99		
Strasburg	Strasburg	DMS-10	co	27-Aug-99	31-Aug-99		
The Island	Swans Island	DMS-10 SSO	ME	01-Sep-99	03-Sep-99		
Warren	Warren	DMS-10	ME	06-Sep-99	08-Sep-99		
Bridge Water	Monticello - MN	DMS-100	MN	09-Sep-99	13-Sep-99		
Camden (IN)	Camden	DMS-100/200	IN	14-Sep-99	16-Sep-99		
Camden Telephone & Telegraph (GA)	St. Marys	DMS100/200	GA	17-Sep-99	21-Sep-99		
JTELCO	Monroe	DMS-500	WI	22-Sep-99	23-Sep-99		
Amelia	Amelia	EWSD	VA	24-Sep-99	28-Sep-99		
September 1999 Cumulative Amount				•	•	116	77.85%
Arvig	Pequot Lakes	EWSD	MN	29-Sep-99	01-Oct-99		
Burlington, Brighton & Wheatland(BB&W)	Bohners Lake	EWSD	WI	04-Oct-99	06-Oct-99		
Continental	Continental	EWSD	ОН	07-Oct-99	11-Oct-99		
Delta County	Hotchkiss	EWSD	CO	12-Oct-99	14-Oct-99		
lome (IN)	Waldron	EWSD	IN	15-Oct-99	19-Oct-99		
fahanoy & Mahatango (M&M)	Mandata	EWSD	PA	20-Oct-99	22-Oct-99		
Aid-America	Stonewall	EWSD	ΟK	25-Oct-99	27-Oct-99		
Midway	Medford	EWSD	WI	28-Oct-99	01-Nov-99		

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TDS TELECOM Tentative Flex ANI Implementation Schedule Attachment D1 As of January 21, 1998

2	Freehause	Contrado Maria	C4-4-	Start Date (see	In Comiton Date	Completed	Percent
Company	Exchange	Switch Model	State	note 1)	In Service Date	Switches	Complete
Nelson-Ball Ground	Nelson	EWSD	GA	02-Nov-99	04-Nov-99		
Oklahoma Communication Systems (OCSI)	Choctaw	EWSD	OK	05-Nov-99	09-Nov-99		
Potlatch	Kendrick	EWSD	ID	10-Nov-99	12-Nov-99		
Somerset	North Anson1	EWSD	ME	15-Nov-99	17-Nov-99		
Southeast Mississippi	Leaksville	EWSD	MS	18-Nov-99	22-Nov-99		
St. Stephen	St. Stephen	EWSD	SC	23-Nov-99	25-Nov-99		
Vernon	Vernon	EWSD	NY	26-Nov-99	30-Nov-99		
Wyandotte	Wyandotte	EWSD	OK	01-Dec - 99	03-Dec-99		
Badger Telecom	Neillsville1	NEAX-61E	WI	06-Dec-99	08-Dec-99		
Badger Telecom	Neillsville2	NEAX-61K	WI	09-Dec-99	13-Dec-99		
Barnardsville	Barnardsville	NEAX-61E	NC	14-Dec-99	16-Dec-99		
Central State	Auburndale	NEAX-61E	WI	17-Dec-99	21-Dec-99		
Central State	Auburndale	NEAX-61E	WI	22-Dec-99	24-Dec-99		
Central State	Necedah	NEAX-61E	WI	27-Dec-99	29-Dec-99		
December 1999 Cumulative Amount						138	92.62%
East Coast	Valders	NEAX-61ES	WI	30-Dec-99	03-Jan-00		
Oklahoma Communication Systems (OCSI)	Kellyville	NEAX-61E	OK	04-Jan-00	06-Jan-00		
Oklahoma Communication Systems (OCSI)	Mounds	NEAX-61E	OK	07-Jan-00	11-Jan-00		
Scandinavia	lola1	NEAX-61K	WI	12-Jan-00	14-Jan-00		
Scandinavia	lola2	NEAX-61E	WI	17-Jan-00	19-Jan-00		
Arizona	Greenhaven	MDX	AZ	20-Jan-00	24-Jan-00		
Arizona	Harquahala	MDX	ΑZ	25-Jan-00	27-Jan-00		
Arizona	Hyder	MDX	ΑZ	28-Jan-00	01-Feb-00		
Arizona	Marble Canyon	MDX	AZ	02-Feb-00	04-Feb-00		
Arizona	Sasabe	MDX	ΑZ	07-Feb-00	09-Feb-00		
Arizona	Supai	MDX	ΑZ	10-Feb-00	14-Feb-00		
Final Cumulative Amount	•					149	100.00%

Notes: 1) June 1, 1998 start date assumes that an FCC order has been issued in February 1998 and that all switch feature negotiation has been completed.

TDS TELECOM Tentative Flex ANI Implementation Schedule For Payphone, Semi-Pubs and COCOTs Attachment D2 Compiled as of January 21, 1998

Company	Payphones	Semi-Pubs	COCOTs	Total	In Service Date	Completed Payphone Lines	Percent Complete
The Home Telephone Company of Pittsboro, Inc.	11	-	7	18	16-Jun-98		
Concord Telephone Exchange, Inc. June 1998 Cumulative Amount	130	10	55	195	24-Jun-98	213	4.71%
Goshen Telephone Company	7	-	-	7	02-Jul-98		
Grove Hill Telephone Corporation	8	-	10	18	07-Jul-98		
Happy Vailey Telephone Company	38	-	-	38	10-Jul-98		
Chichester Telephone Company, Inc.	17	-	-	17	15-Jul-98		
Kearsarge Telephone Company	61	13	-	74	15-Jul-98		
Meriden Telephone Company, Inc.	6	-	-	6	15-Jul-98		
Little Miami Communications Corporation	17		2	19	20-Jul-98		
Ludlow Telephone Company	22	15	-	37	23-Jul-98		
Perkinsville Telephone Company, Inc.	4 2	-		4	23-Jul-98 28-Jul-98		
Winsted Telephone Company	21	8 7	1 -	11 28	20-Jul-96 31-Jul-98		
Northfield Telephone Company Quincy Telephone Company	48	20	197	265	05-Aug-98		
Service Telephone Company, Inc.	5	20	6	11	13-Aug-98		
Shiawassee Telephone Company	50	-	6	56	18-Aug-98		
Humphreys County Telephone Company	3	8	5	16	31-Aug-98		
Tennessee Telephone Company	391	24	208	623	08-Sep-98		
Tipton Telephone Company	46	-	-	46	11-Sep-98		
Virginia Telephone Company	11	25	3	39	16-Sep-98		
Waunakee Telephone Company, Inc.	25	4	15	44	21-Sep-98		
Norway Telephone Company	5	-	4	9	24-Sep-98		
Williston Telephone Company	22	-	30	52	24-Sep-98		
September 1998 Cumulative Amount						1,633	36.14%
Asotin Telephone Company	12	-	-	12	20-Oct-98		
Black Earth Telephone Company, Inc.	6	-	-	6	23-Oct-98		
Blue Ridge Telephone Company	48	-	29	77	28-Oct-98		
Calhoun City Telephone Company, Inc.	15	-	11	26	02-Nov-98		
Cleveland County Telephone Company, Inc.	10	5		15	10-Nov-98		
Communication Corporation of Michigan	28	8		42	13-Nov-98		
Communications Corporation of Indiana	101 14		-	170 17	18-Nov-98 23-Nov-98		
Communications Corporation of Southern Indiana Decatur Telephone Company	12	1		15	26-Nov-98		
Grantland Telecom, Inc.	18	4		28	01-Dec-98		
Hartland & St. Albans Telephone Company	18	-		18	04-Dec-98		
Home Telephone Company - OR	10	_	. <u>-</u>	10	09-Dec-98		
Hornitos Telephone Company	10	_		10	14-Dec-98		
Leslie County Telephone Company	6	48	13	67	25-Dec-98		
McClellanville Telephone Company, Inc.	7			19	30-Dec-98		
December 1998 Cumulative Amount						2,165	47.92%
Mt. Vernon Telephone Company	37		- 10	47	04-Jan-99	1	
Myrtle Telephone Company Inc.	1			1	07-Jan-99	1	
New Castle Telephone Company	15	-	- 2	17	12-Jan-99	1	
New London Telephone Company	8		- 4	12	15-Jan-99		
Oakman Telephone Company, Inc.	16			16	25-Jan-99		
Oakwood Telephone Company	5			5	28-Jan-99		
Oklahoma Communication Systems, Inc.	84			122			
Orchard Farm Telephone Company	10			10	15-Feb-99		
Peoples Telephone Company	51		- 28	79	03-Mar-99		
Port Byron Telephone Company March 1999 Cumulative Amount	20		- 11	31	08-Mar-99	, 2,505	55.44%
Southwestern Telephone Company	138		- 103	241	01-Apr-99	,	
The Stoutland Telephone Company	12		- 103	13	,		
Sugar Valley Telephone Company	22		- 12	34	•		
Tellico Telephone Company, Inc.	51			86	•		
Tenney Telephone Company	10		- 7	17			
West Penobscot Telephone & Telegraph Company	15			15			
Winterhaven Telephone Company	50		-	50			

TDS TELECOM Tentative Flex ANI Implementation Schedule For Payphone, Semi-Pubs and COCOTs Attachment D2 Compiled as of January 21, 1998

Wolvarine Telephone Company 56	Commence	Doughana	Semi-Pubs	COCOTs	Total	In Service Date	Completed Payphone Lines	Percent Complete
Arcadia Telephone Company 5							Lilles	Complete
The Varlue Telephone Company			4			•		
Bandual Fleephone Company			-			•		
Sulter Telephone Company nc. 24	· · · · · · · · · · · · · · · · · · ·		2					
Charbam Telephone Company 22	· · · · · · · · · · · · · · · · · · ·					•		
Daruber Telephone Company, Inc. June 1999 Cumulative Amount Edwards Telephone Company, Inc. June 1999 Cumulative Amount 16 16 07-Jule9 per 1999 Cumulative Amount 20 2 22 12-Jul-99 pland Telephone Company, Inc. Lewks River Telephone Company 18 18 20-Jul-99 pland Telephone Company 20 2 15 17 22-Jul-99 pland Telephone Company 18 18 20-Jul-99 pland Telephone Company 20 - 15 17 22-Jul-99 pland Telephone Company 21 17 38 02-Aug-99 pland Telephone Company 21 17 38 02-Aug-99 pland Telephone Company 16 17 4 37 05-Aug-99 pland Telephone Company 16 17 4 37 05-Aug-99 pland Telephone Company 16 17 4 37 05-Aug-99 pland Telephone Company 17 5 18 3 18 13-Aug-99 pland Telephone Company, Inc. 18 1 11 11 22 26-Aug-99 pland Telephone Company, Inc. 19 1 11 5 18 20-Jul-99 pland Telephone Company 10 1 1 1 1 1 1 1 23 26-Aug-99 pland Telephone Company 11 5 - 2 17 31-Aug-99 pland Telephone Company 12 - 12 03-Sep-99 pland Telephone Company 13 2 - 12 03-Sep-99 pland Telephone Company 14 1 1 1 1 1 2 2 36-Aug-99 pland Telephone Company 15 - 2 17 31-Aug-99 pland Telephone Company 16 - 1 16 08-Sep-99 pland Telephone Company 17 18 13 1 2 2 3 1 3 3 13-Sep-99 pland Telephone Company 18 29 1 39 13-Sep-99 pland Telephone Company 19 29 1 39 13-Sep-99 pland Telephone Company 20 20 21 27 22 247 28-Sep-99 pland Telephone Company 21 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	* *					-		
Deposit Falephone Company, Inc. 16 - - 16 07-Jul-99 12-Jul-99	· · · · · · · · · · · · · · · · · · ·							
Substance Subs	· · · · · · · · · · · · · · · · · · ·		10					
Hampden Telephone Company	• • •	5 4	10	J	33	29-04II-55	3,166	70.08%
Island Telephone Company	Edwards Telephone Company, Inc.	16	•	-	16	07-Jul-99		
Lewis River Telephone Company 2 - 15 17 23-Jul-99 Lewis River Telephone Company 3 7 - 10 28-Jul-99 Lewisport Telephone Company 3 7 - 10 28-Jul-99 Lewisport Telephone Company 16 17 4 37 05-Aug-99 McDaniel Telephone Company 16 17 4 37 05-Aug-99 Riverside Telephone Company 16 17 4 37 05-Aug-99 Riverside Telephone Company 17 15 18 34 10-Aug-99 Stockbridge & Sherwood Telephone Company 17 15 18 34 10-Aug-99 Stockbridge & Sherwood Telephone Company 18 5 13 18 13-Aug-99 Stockbridge & Sherwood Telephone Company 15 1 1 1 1 1 1 23 26-Aug-99 Stockbridge & Sherwood Telephone Company 15 - 2 17 31-Aug-99 Rivigewater Telephone Company 12 - 12 03-Sep-99 Rivigewater Telephone Company 16 - 16 08-Sep-99 Rivigewater Telephone Company 19 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 29 1 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 29 1 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 29 1 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 29 1 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 29 1 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 29 1 29 1 39 13-Sep-99 Rivigewater Telephone Company 19 20 1 39 13-Sep-99 Rivigewater Telephone Company 19 2 1 39 13-Sep-99 Rivigewater Telephone Company 19 3 3 1 3 10 3 10 3 10 3 10 3 29 2 2 3 3 5 14 2 3 3 5 14 2 3 3 5 14 2 3 3 5 14 2 3 3 5 14 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	lampden Telephone Company	20	2	-	22	12-Jul-99		
Average	sland Telephone Company	18	-	•	18	20-Jul-99		
Lewispoint Telephone Company	Lewis River Telephone Company	2	-	15	17	23-Jul-99		
McDaniel Telephone Company McSate Telegonn, Inc. Salem Telephone Company Neverside Telecom, Inc. Salem Telephone Company Neverside Telecom, Inc. Salem Telephone Company, Inc. Salem Telephone Company, Inc. Salem Telephone Company, Inc. Salem Telephone Company Stockbridge & Shewcood Telephone Company Stockbridge & Stockbridge & Shewcood Telephone Company Stockbridge & Stockbridge & Shewcood Telephone Company Stockbridge & Stockbr	· · ·	3	7	-	10	28-Jul-99		
Mid-State Telephone Company Maren Telephone Company Mid-America Telephone Company Mid-America Telephone Company Mid-Marenica Telephone Company Maren Mare		21		17	38	02-Aug-99		
Riverside Telecom, Inc. 11 5 18 3 34 10-Aug-98 Saleam Telephone Company, Inc. 5 - 3 8 13-Aug-98 Saleam Telephone Company, Inc. 5 - 3 8 13-Aug-98 Stockbridge & Sherwood Telephone Company 15 - 2 17 31-Aug-99 Stockbridge & Sherwood Telephone Company 15 - 2 17 31-Aug-99 The Island Telephone Company 16 16 08-89-99 Ridgewater Telephone Company 16 16 08-89-99 Ridgewater Telephone Company 16 16 08-89-99 Ridgewater Telephone Company 18 4 16-89-99 Carnden - IN 4 4 16-89-99 Carnden - GA 80 80 21-Sep-99 UTELCO, Inc. 113 - 20 133 23-Sep-99 UTELCO, Inc. 113 - 10 14 06-Oct-99 Unulative Amount Any Telephone Company 11 3 - 14 06-Oct-99 Continental Telephone Company 11 3 - 14 06-Oct-99 Continental Telephone Company, Inc. 11 3 - 16 11-Oct-99 Utel Country Tele-Comm, Inc. 13 - 20 13 23-Sep-99 Unulative Amount Any Telephone Company, Inc Waldron 11 3 - 16 11-Oct-99 Utel Country Tele-Comm, Inc. 13 - 16 11-Oct-99 Utel Country Tele-Comm, Inc. 15 - 6 19-Oct-99 Unidex Delephone Company, Inc Waldron 16 6 19-Oct-99 Utel Country Telephone Company 17 - 5 10 10-Oct-99 Utel Country Telephone Company 18 7 22-Oct-99 Utel Country Telephone Company 19 - 7 22-Oct-99 Utel Country Telephone Company 19 - 10 10 10 10 10 10 10 10 10 10 10 10 10	· · ·		17			-		
Saleur Belaphone Company, Inc. 5	· · · · · · · · · · · · · · · · · · ·					-		
Saluda Mountain Telephone Company Sitraburg Telephone Company, Inc. 11 1 1 1 1 23 26-Aug-99 Sitraburg Telephone Company 15 - 2 17 31-Aug-99 The Island Telephone Company 15 - 2 17 31-Aug-99 The Island Telephone Company 16 - 16 08-Sep-99 Navaren Telephone Company 16 - 16 08-Sep-99 Sitraburg Telephone Company 16 - 16 08-Sep-99 Sitraburg Telephone Company 16 - 16 08-Sep-99 Sitraburg Telephone Company 17 1 39 13-Sep-99 Sitraburg Telephone Company 18 2 - 18 16 08-Sep-99 Sitraburg Telephone Company 19 29 1 39 13-Sep-99 Sitraburg Telephone Company 19 29 1 39 13-Sep-99 Sitraburg Telephone Company 10 1 30 21-Sep-99 September 1899 Cumulative Amount 10 1 25 - 20 133 23-Sep-99 September 1899 Cumulative Amount 11 3 - 10 13 23-Sep-99 September 1899 Cumulative Amount 11 3 - 14 06-Oct-99 September 1899 Cumulative Amount 11 3 - 14 06-Oct-99 Southeast Missington and Wheatland Telephone Company 16 - 16 11-Oct-99 Detat County Tele-Comm, Inc. 16 - 2 6 19-Oct-99 Mahanoy & Mahantango Telephone Company 17 2 2 7 22-Oct-99 Mahanoy & Mahantango Telephone Company 18 2 7 22-Oct-99 Meld-America Telephone Company 19 3 - 3 12-Nov-99 Nelson-Ball Ground Telephone Holding, Inc. 25 - 10 35 04-Nov-99 Nelson-Ball Ground Telephone Company 19 3 - 3 12-Nov-99 Southeast Mississippi Telephone Company 19 3 - 3 12-Nov-99 Southeast Mississippi Telephone Company 19 3 - 1 15 12-Nov-99 Southeast Mississippi Telephone Company 10 1 1 1 1 2 2 2 1 2 2 1 1 3 1 13-Dec-99 Badger Telecom, Inc. 26 8 11 31 30-Jan-00 Southeast Telephone Company 27 2 2 4 18-Dec-99 Southeast Telephone Company 38 2 - 5 19-Jan-00 Arizona Telephone Company 39 3 - 10 40 83 14-Feb-00 Final Cumulative Amount 4,518 100						_		
Stockbridge & Sharwood Telephone Company, Inc. 11	the state of the s		-			•		
Strasburg Telephone Company			1			•		
The Island Telephone Company 12	• • •					_		
Marran Telephone Company 16	• • • • • • • • • • • • • • • • • • • •					-		
Striggevater Telephone Company 9 29 1 39 13-Sep-96 Camden - IN 4 4 16-Sep-99 Camden - IN 4 80 21-Sep-99 Camden - IN 25 20 133 23-Sep-99 Camden - IN 25 20 24 28-Sep-99 Camden - IN 25 20 24 28-Sep-99 Camden - IN 25 20 24 28-Sep-99 Camden - IN 25 25 25 27 28-Sep-99 Camden - IN 25 25 25 25 25 25 2	· · · · · · · · · · · · · · · · · · ·		-					
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Camden - GA						•		
UTELCO, Inc. 113 - 20 133 23-Sep-99 Arnelia Telephone Corporation 25 - 22 47 26-Sep-99 3,750 83.			_	_		•		
Arnelia Telephone Corporation September 1999 Cumulative Amount 25 - 22 47 28-Sep-99 3,750 83. Arvig Telephone Company 43 40 6 89 01-Oct-99 Burlington, Brighton and Wheatland Telephone Company 11 3 - 14 06-Oct-99 Continental Telephone Company 16 - 16 11-Oct-99 Delta County Tele-Comm, Inc. 33 - 23 56 14-Oct-99 Home Telephone Company, Inc Waldron 6 6 19-Oct-99 Mid-America Telephone Company 5 - 2 7 22-Oct-99 Mid-America Telephone, Inc. 95 - 4 9 27-Oct-99 Mid-America Telephone, Inc. 96 21 7 54 01-Nov-99 Mid-Marel Gorphany 10 35 04-Nov-99 Nelson-Balf Ground Telephone Holding, Inc. 10 35 04-Nov-99 Pottatch Telephone Company 13 - 3 12-Nov-99 Troy Telephone Company, Inc. 4 - 1 5 12-Nov-99 Sourheast Mississippi Telephone Company 139 3 - 142 17-Nov-99 Sourheast Mississippi Telephone Company 14 1 14 29 22-Nov-99 St. Stephen Telephone Company 17 - 34 51 25-Nov-99 Oriskany Falls Telephone Company 18 1 - 8 39 30-Nov-99 Vernon Telephone Company 19 2 1 3 6 03-Dec-99 Badger Telepone Company 2 1 3 6 03-Dec-99 Badger Telephone Company 2 1 3 6 03-Dec-99 Badger Telephone Company 3 - 10 43 29-Dec-99 Central State Telephone Company 3 2 - 5 19-Jan-00 Arizona Telephone Company 3 1 40 83 14-Feb-00 Final Cumulative Amount 4,518 100			-	20		•		
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Burlington, Brighton and Wheatland Telephone Company 11 3 - 14 06-Oct-99	Arvig Telephone Company	43	40	6	89	01-Oct-99		
Continental Telephone Company Delta Country Tele-Comm, Inc. 33 - 23 55 14-Oct-99 Home Telephone Company, Inc Waldron 66 6 19-Oct-99 Mahanoy & Mahantango Telephone Company Mid-America Telephone, Inc. 5 - 2 7 22-Oct-99 Mid-America Telephone, Inc. 5 - 4 9 27-Oct-99 Mid-America Telephone Company Midway Telephone Company 26 21 7 54 01-Nov-99 Nelson-Ball Ground Telephone Holding, Inc. 25 - 10 35 04-Nov-99 Pottatch Telephone Company 3 - 3 12-Nov-99 Troy Telephone Company, Inc. 4 - 1 5 12-Nov-99 Southeast Mississippi Telephone Company 139 3 - 142 17-Nov-99 Southeast Mississippi Telephone Company 14 1 14 29 22-Nov-99 St. Stephen Telephone Company 17 - 34 51 25-Nov-99 Oriskany Falls Telephone Company 18 - 8 39 30-Nov-99 Vernon Telephone Company 2 1 3 6 03-Dec-99 Badger Telecom, Inc. 23 7 1 31 13-Dec-99 Badger Telecom, Inc. 23 7 1 31 13-Dec-99 Badger Telecom, Inc. 24 8 11 31 03-Jan-00 Final Cumulative Amount 4,518 100 4,518 100	- · · · · · · · · · · · · · · · · · · ·							
Delta County Tele-Comm, Inc. 33 - 23 56 14-Oct-99	· · · · · · · · · · · · · · · · · · ·							
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Mahantango Telephone Company 5 - 2 7 22-Oct-99 Mid-America Telephone, Inc. 5 - 4 9 27-Oct-99 Mid-America Telephone Company 26 21 7 54 01-Nov-99 Nelson-Ball Ground Telephone Holding, Inc. 25 - 10 35 04-Nov-99 Potlatch Telephone Company 3 - - 3 12-Nov-99 Troy Telephone Company, Inc. 4 - 1 5 12-Nov-99 Sornerset Telephone Company, Inc. 4 - 1 5 12-Nov-99 Sornerset Telephone Company 139 3 - 142 17-Nov-99 Sornerset Telephone Company 14 1 14 29 22-Nov-99 Sornerset Telephone Company 17 - 34 51 25-Nov-99 St. Stephen Telephone Company 17 - 34 51 25-Nov-99 Oriskany Falls Telephone Company 31 - 8 39 30-Nov-99 Vernon Telephone Company 2 1 3 6			_					
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Somerset Telephone Company 139 3	· · · · · · · · · · · · · · · · · · ·							
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St. Stephen Telephone Company 17 - 34 51 25-Nov-99 Oriskany Falls Telephone Corporation 4 6 - 10 30-Nov-99 Vernon Telephone Company 31 - 8 39 30-Nov-99 Wyandotte Telephone Company 2 1 3 6 03-Dec-99 Badger Telecom, Inc. 23 7 1 31 13-Dec-99 Barnardsville Telephone Company 2 - 2 4 16-Dec-99 Central State Telephone Company 33 - 10 43 29-Dec-99 December 1999 Cumulative Amount 4,399 97 EastCoast Telecom, Inc. 12 8 11 31 03-Jan-00 Scandinavia Telephone Company 3 2 - 5 19-Jan-00 Arizona Telephone Company 33 10 40 83 14-Feb-00 Final Cumulative Amount	· · · · · · · · · · · · · · · · · · ·							
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Wyandotte Telephone Company 2 1 3 6 03-Dec-99 Badger Telecom, Inc. 23 7 1 31 13-Dec-99 Barnardsville Telephone Company 2 - 2 4 16-Dec-99 Central State Telephone Company 33 - 10 43 29-Dec-99 December 1999 Cumulative Amount 4,399 97 EastCoast Telecom, Inc. 12 8 11 31 03-Jan-00 Scandinavia Telephone Company 3 2 - 5 19-Jan-00 Arizona Telephone Company 33 10 40 83 14-Feb-00 Final Cumulative Amount 4,518 100	• •							
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Arizona Telephone Company 33 10 40 83 14-Feb-00 Final Cumulative Amount 4,518 100								
Final Cumulative Amount 4,518 100								
Total 2,837 395 1,286 4,518	· · · · · · · · · · · · · · · · · · ·					-		100.00
	Total	2,837	395	1,286	4,518	=		

Note: 1) This schedule conservatively assumes that all payphones will have Flex ANI switch capability when the last switch in the company has been upgraded with Flex ANI.

TDS TELECOM Computation of Estimated Flex ANI Cost Recovery Rate Attachment E1 As of January 21, 1998

Line	Year	1	2	_	3	4	5	6	7	8	9	L	10	Total
2 Amortiza	OS Estimated Flex ANI Cost ation	\$ 2,548,270 254,827	\$ 2,548,270 509,654	\$	2,548,270 764,481	\$ 2,548,270 1,019,308	\$ 2,548,270 1,274,135	\$ 2,548,270 1,528,962	\$ 2,548,270 1,783,789	\$ 2,548,270 2,038,616	\$ 2,548,270 2,293,443	\$	2,548,270 2,548,270	
3 4 Net Inve 5 (Ln 1 - L		\$ 2,293,443	\$ 2,038,616	\$	1,783,789	\$ 1,528,962	\$ 1,274,135	\$ 1,019,308	\$ 764,481	\$ 509,654	\$ 254,827	\$	-	
	2 11.25% vg. Net Investment)*.5 * 11.25%)	272,346	243,678		215,010	186,342	157,674	129,006	100,338	71,670	43,002		14,334	
9 10 Taxes 11 (Ln 7 * .5	538461)	146,648	131,211		115,775	100,338	84,901	69,465	54,028	38,592	23,155		7,718	
13 Deprecia	ation	 254,827	 254,827		254,827	 254,827	 254,827	254,827	 254,827	 254,827	 254,827		254,827	
	venue Requirement .n 10 + Ln 13)	\$ 673,821	\$ 629,717	\$	585,612	\$ 541,507	\$ 497,403	\$ 453,298	\$ 409,193	\$ 365,089	\$ 320,984	\$	276,879	\$ 4,753,503
18 Monthly 19 (Ln 15/ 1 20	Revenue Requirement 2)	56,152	52,476		48,801	45,126	41,450	37,775	34,099	30,424	26,749		23,073	39,613
21 Payphon	e Lines	 4,500	 4,500		4,500	 4,500	 4,500	4,500	 4,500	 4,500	4,500		4,500	 4,500
	Rate Per Payphone Line n 21)	\$ 12.48	\$ 11.66	\$	10.84	\$ 10.03	\$ 9.21	\$ 8.39	\$ 7.58	\$ 6.76	\$ 5.94	\$	5.13	\$ 8.80

Note: 1) This calculation assumes that maintenance costs are not material and that the switch replacement cost is not included in the total cost.

TDS TELECOM
Computation of Estimated Flex ANI Cost Recovery Rate
Attachment E2
As of January 21, 1998

Line	Year	1	2	3	4	5		Total
2	Total TDS Estimated Flex ANI Cost Amortization	\$ 2,548,270 509,654	\$ 2,548,270 1,019,308	\$ 2,548,270 1,528,962	\$ 2,548,270 2,038,616	\$ 2,548,270 2,548,270	_	
	Net Investment (Ln 1 - Ln 2)	\$ 2,038,616	\$ 1,528,962	\$ 1,019,308	\$ 509,654	\$ -		
7	Return @ 11.25% (Ln 4 (Avg. Net Investment)*.5 * 11.25%)	258,012	200,676	143,340	86,004	28,668		
10	Taxes (Ln 7 * .538461)	138,930	108,056	77,183	46,310	15,437		
	Depreciation	 509,654	 509,654	509,654	 509,654	 509,654	•	
15	Total Revenue Requirement (Ln 7 + Ln 10 + Ln 13)	\$ 906,596	\$ 818,387	\$ 730,177	\$ 641,968	\$ 553,759	\$	3,650,886
	Monthly Revenue Requirement (Ln 15/ 12)	75,550	68,199	60,848	53,497	46,147		60,848
	Payphone Lines	 4,500	 4,500	 4,500	 4,500	4,500		4,500
	Monthly Rate Per Payphone Line (Ln 18/ Ln 21)	\$ 16.79	\$ 15.16	\$ 13.52	\$ 11.89	\$ 10.25	\$	13.52

Note: 1) This calculation assumes that maintenance costs are not material and that the switch replacement cost is not included in the total cost.

TDS TELECOM Computation of Estimated Flex ANI Cost Recovery Rate Attachment E3 As of January 21, 1998

Line	Year	 1	 2	3		Total
	Total TDS Estimated Flex ANI Cost Amortization	\$ 2,548,270 849,423	\$ 2,548,270 1,698,848	\$ 2,548,270 2,548,270		
4	Net investment (Ln 1 - Ln 2)	\$ 1,698,847	\$ 849,422	\$ -		
	Return @ 11.25% (Ln 4 (Avg. Net Investment)*.5 * 11.25%)	238,900	143,340	47,780		
10	Taxes (Ln 7 * .538461)	128,639	77,183	25,728		
	Depreciation	 849,423	 849,423	 849,423	•	
	Total Revenue Requirement (Ln 7 + Ln 10 + Ln 13)	\$ 1,216,962	\$ 1,069,946	\$ 922,931	\$	3,209,839
18	Monthly Revenue Requirement (Ln 15/ 12)	101,413	89,162	76,911		89,162
	Payphone Lines	 4,500	 4,500	 4,500		4,500
	Monthly Rate Per Payphone Line (Ln 18/ Ln 21)	\$ 22.54	\$ 19.81	\$ 17.09	\$	19.81

Note: 1) This calculation assumes that maintenance costs are not material and that the switch replacement cost is not included in the total cost.